

IN THE CLAIMS:

Cancel claims 1-21. Add 22-36.

22. **(New)** An X-ray system having an X-ray-sensitive camera for the creation of tomographic images, which camera includes a first and a second image detector, wherein said first image detector is provided for the creation of a panoramic tomographic image and said second image detector for the creation of a 2D image, and means are provided for the creation of 3D images of a subvolume of the mandibular arch, which means create several 2D images from different directions and compute a 3D image therefrom, and including adjustment means by means of which said camera and/or said image detector and/or said X-ray emitter and/or a primary diaphragm and/or combinations thereof can be adjusted such that said second image detector present in said camera can be moved into the optical path of said X-ray emitter.
23. **(New)** An X-ray system as defined in claim 22, wherein said second image detector is a face sensor.
24. **(New)** An X-ray system as defined in claim 22, including control means are provided such that within the 3D image a subvolume comprising a portion of the panoramic tomographic image can be imaged.
25. **(New)** An X-ray system as defined in claim 22, including means for the creation of 3D images using the cone beam technology with associated reconstruction algorithms.

26. **(New)** An X-ray system as defined in claim 22, including adjustment means and/or control means by means of which said camera and an X-ray emitter can be adjusted such that the center of rotation lies in the subvolume to be imaged.
27. **(New)** An X-ray system as defined in claim 22, wherein said adjustment means are provided in said casing of said camera or in connecting means between said camera and a support or on said support itself.
28. **(New)** An X-ray system as defined in claim 22, including an installation for the creation of teleradiographic images with another image detector and, when said X-ray emitter is aligned for the creation of a teleradiographic image, said camera is disposed in the region of the optical path between said X-ray emitter and said image detector of said installation for the creation of teleradiographic images and is radiolucent in said region.
29. **(New)** An X-ray system as defined in claim 22, including an installation for the creation of teleradiographic images with another image detector and the path of adjustment is such that, when the X-ray emitter is aligned for the creation of a teleradiographic image, said camera can be moved out of the optical path between said X-ray emitter and said image detector of said installation for the creation of teleradiographic images.
30. **(New)** An X-ray system as defined in claim 22, wherein said camera is mounted for eccentric displacement and, in a first position, said image detector is positioned in the X-ray fan beam for the creation of a panoramic tomographic image and, in a second

position, said image detector is positioned in the X-ray fan beam for the creation of a 3D image.

31. **(New)** An X-ray-sensitive camera, comprising a first X-ray-sensitive image detector for the creation of a tomographic image, a second X-ray-sensitive image detector for the creation of plane images and wherein the two image detectors are disposed in a common casing, and said second image detector is disposed alongside said first image detector and including adjustment means for the purpose of causing, as desired, said first image detector or said second image detector to assume correct alignment relative to an X-ray emitter for the creation of the respective X-ray image.
32. **(New)** A camera as defined in claim 31, wherein said second image detector is disposed on a rear side of said first image detector.
33. **(New)** A camera as defined in claim 32, wherein said adjustment means and the two image detectors are housed in a common casing of said camera.
34. **(New)** A camera as defined in claim 33, wherein said adjustment means are provided on said casing of said camera and in the region of connecting means for the attachment of said camera to a support and said camera can be variably displaced, as an entity, relatively to said connecting means.
35. **(New)** A camera as defined in claim 34, wherein said camera has a radiolucent region.

36. **(New)** A camera as defined in claim 35, wherein said radiolucent region is disposed between or alongside said first image detector and said second image detector.